

Maryland Historical Trust

Maryland Inventory of Historic Properties number: AL-II-B-130 ✓

Name: MDS OVER TOWN CREEK

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <input checked="" type="checkbox"/>	Eligibility Not Recommended <input type="checkbox"/>
Criteria: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D Considerations: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G <input type="checkbox"/> None	
Comments: _____ _____	
Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u>3 April 2001</u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u>3 April 2001</u>

1715

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. AL-II-B-130

SHA Bridge No. 1047

Bridge name MD 51 over Town Creek

LOCATION:

Street/Road name and number [facility carried] MD 51 (Oldtown Road)

City/town Town Creek

Vicinity X

County Allegany

This bridge projects over: Road Railway Water Land

Ownership: State County Municipal Other

HISTORIC STATUS:

Is the bridge located within a designated historic district? Yes No
National Register-listed district National Register-determined-eligible district
Locally-designated district Other

Name of district _____

BRIDGE TYPE:

Timber Bridge _____:
Beam Bridge _____ Truss -Covered Trestle Timber-And-Concrete _____

Stone Arch Bridge _____

Metal Truss Bridge

Movable Bridge _____:
Swing _____ Bascule Single Leaf Bascule Multiple Leaf _____
Vertical Lift _____ Retractable _____ Pontoon _____

Metal Girder _____:
Rolled Girder _____ Rolled Girder Concrete Encased _____
Plate Girder _____ Plate Girder Concrete Encased _____

Metal Suspension _____

Metal Arch _____

Metal Cantilever _____

Concrete _____:
Concrete Arch _____ Concrete Slab Concrete Beam _____ Rigid Frame _____
Other _____ Type Name _____

DESCRIPTION:

Setting: Urban _____ Small town _____ Rural X

Describe Setting:

Bridge 1047 carries Maryland Route 51 over Town Creek in the vicinity of Town Creek, Allegany County. Route 51 runs generally in an east-west direction in the area while Town Creek flows north-south. The bridge is situated in a rural area. The area is relatively undeveloped with woods and a residence near the bridge.

Describe Superstructure and Substructure:

Bridge 1047, constructed in 1932, is a two span, Pratt through truss measuring 64.2 meters (210.5 feet) in total length. Both spans are identical, measuring 32 meters (105.25 feet), and have six panels with diagonal endposts. The top chord is a built-up section of steel channels and a cover plate with lattice bars connected by rivets. The bottom chord consists of two steel angles and a cover plate connected with rivets. The floor system has steel stringers and a concrete deck. The verticals are steel beams, and the diagonals are steel channels connected by plates. All connections are riveted. The width of the roadway is 7.9 meters (26 feet) and the distance between the centerline of the trusses is 8.9 meters (29.33 feet). There is no sidewalk on the bridge and the truss members are protected by a steel angle lattice railing. The bridge, which was built on an approximately 60° skew, is not posted and has a sufficiency rating of 73.1. The abutments are concrete with u-shaped concrete wing walls, and there is a concrete pier. There are four plaques on the bridge, all on the diagonal endposts. Two plaques record that the bridge was built by the Roanoke Iron and Bridge Works in 1932, and two plaques identify members of the State Roads Commission.

Discuss Major Alterations:

Inspection reports from 1995 detail that the bridge is in good condition, with some areas of rusting, peeling paint, and spalled concrete. The bridge has had some truss members and steel stringers replaced in the past, however the date is not recorded. The concrete pier has also been patched.

HISTORY:

WHEN was the bridge built 1932

This date is: Actual X Estimated _____

Source of date: Plaque X Design plans _____ County bridge files/inspection form X

Other (specify): _____

WHY was the bridge built?

The bridge was constructed in response to the need for more efficient transportation network and increased load capacity.

WHO was the designer?

State Roads Commission

WHO was the builder?

Roanoke Iron and Bridge Works, Roanoke, Virginia

WHY was the bridge altered?

The bridge was altered to ensure its structural integrity.

Was this bridge built as part of an organized bridge-building campaign?

The bridge was constructed by the Roanoke Iron and Bridge Works from designs by the State Roads Commission, as part of a campaign to increase load capacity on secondary roads during the 1930s.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:

A - Events _____ B- Person _____
C- Engineering/architectural character X

Bridge 1047 was previously surveyed by the Maryland Historical Trust in 1980; however, no determination of eligibility was made. The bridge is eligible for the National Register of Historic Places under Criterion C, as a significant example of a metal truss bridge. The structure has a high degree of integrity and retains such character-defining elements of the type, including the original truss members (top and bottom chords, verticals, diagonals, plates, and rivets), and the concrete abutments and pier.

Was the bridge constructed in response to significant events in Maryland or local history?

This bridge was one of a large number of metal truss bridges built in Maryland in the late nineteenth and early twentieth centuries. Metal trusses built in the late nineteenth century were frequently of wrought iron construction and featured pinned connections. By the turn of the century, steel was the material of choice and connections were sometimes pinned and sometimes rivetted. By 1920, the truss type exhibited more heavily configured members and rivetted connections.

General Truss Bridge Trends

The first metal truss bridges in the United States were built to carry rail and canal traffic. A rapidly expanding railroad network, with needs for long spans, heavy load capacity and rapid construction, served as the impetus for advances in metal truss technology from the mid-nineteenth century to its close. The earliest metal truss forms of the United States were patented and introduced between 1830 and the Civil War, including the popular Pratt (1844) and Warren (1848) types.

From the Civil War through the end of the century metal truss technology improved in response to increasing loads and speeds, and new transportation needs; steel began to replace iron; numerous "bridge works" and "iron works" were established in the eastern U.S. for fabricating and shipping the truss components to the bridge site; and expanding road networks required a low cost, expedient bridge type.

General Trends in Maryland

In Maryland, the earliest metal truss bridges carried rail lines, including the Baltimore & Ohio (B&O) and the Baltimore and Susquehanna Railroads. As early as 1849, B&O Chief Engineer Benjamin H. Latrobe recommended the construction of metal truss bridges for "large crossings"; in 1850 he reported "much satisfaction" with the future of iron bridges after constructing the metal truss bridge at Savage.

Numerous metal truss bridges were manufactured in Baltimore, the early industrial hub of bridge building activity in the state, from the 1850s through the 1880s. Among the early bridge builders in the 1850s and 1860s were former B&O employees, B.H. Latrobe and Wendell Bollman, founders of competing Baltimore bridge building companies. Historical research identified more than twenty-five bridge companies in the region that built truss bridges in Maryland between 1850 and 1920. Among these were the Wrought Iron Bridge Company, King Iron Bridge Company, Patapsco Bridge and Iron Works, Baltimore Bridge Company, Pittsburg Bridge Company, Penn Bridge Company, Smith Bridge Company, Groton Bridge and Manufacturing Company, Roanoke Iron and Bridge Company, York Bridge Company, Vincennes Bridge Company, Bethlehem Steel Company, American Bridge Company.

The location of the Baltimore & Ohio Railroad, Baltimore bridge fabricators, and the urban needs of the city and its environs resulted in the erection of numerous early truss bridges in Baltimore and the surrounding area. Initially constructed for the railroads, their use quickly came to replace the earlier timber bridges on Baltimore roads.

From Baltimore, the use of the metal truss spread to other parts of the state, with County Commissioners in the Piedmont and Appalachian Plateau counties erecting numerous metal trusses from the 1870s to the early twentieth century. Numerous truss spans were erected during that time. Records indicate that in the early twentieth century the York Bridge Company built a number of metal trusses in the state, primarily Pratt but also Warren and Parker trusses. In Frederick County, King Iron Bridge Manufacturing Company erected several bowstring pony truss bridges.

Bridge 1047 is a Pratt truss. The Pratt truss was first developed in 1844 under patent of Thomas and Caleb Pratt. Prevalent from the 1840s through the early twentieth century, the Pratt has diagonals in tension, verticals in compression, except for the hip verticals immediately adjacent to the inclined end posts of the bridge. Pratt trusses were initially built as a combination wood and iron truss, but were soon constructed in iron only. The Pratt type successfully survived the transition to iron construction as well as the second transition to steel usage. The Pratt truss inspired a large number of variations and modified subtypes during the nineteenth and early twentieth centuries.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

There is no evidence that the construction of this bridge had a significant impact on the growth and development of this area.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from the historic/visual character of the potential district?

The bridge is located in an area which does not appear to be eligible for historic designation.

Is the bridge a significant example of its type?

The bridge is a potentially significant example of a truss bridge, possessing a high degree of integrity.

Does the bridge retain integrity of important elements described in the Context Addendum?

The bridge retains the character-defining elements of its type, as defined by the Statewide Historic Bridge Context, including the original truss members (top and bottom chords, verticals, diagonals, plates, and rivets), and the concrete abutments and pier.

Is the bridge a significant example of the work of a manufacturer, designer, and/or engineer?

This bridge is a significant example of the work of the State Roads Commission and the Roanoke Iron and Bridge Works.

Should the bridge be given further study before an evaluation of its significance is made?

No further study of this bridge is required to evaluate its significance.

BIBLIOGRAPHY:

County inspection/bridge files SHA inspection/bridge files X
Other (list):

Maryland Historical Trust, *Inventory Form for State Historic Sites Survey*. 1980

P.A.C. Spero & Company and Louis Berger & Associates, *Historic Highway Bridges in Maryland: Historic Context Report*. Prepared for the Maryland State Highway Administration. 1995.

SURVEYOR:

Date bridge recorded July 1997

Name of surveyor Caroline Hall/Ryan McKay

Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Suite 412, Baltimore, Maryland 21204

Phone number 410-296-1635

FAX number 410-296-1670



1. AL-#-8-130
2. 1047, MD 51 over Town Creek
3. Allegany County, MD
4. Ryan McKay
5. July, 1997
6. MD 5110
7. West approach
8. 1 of 5



1. AL - II - B - 130
2. 1047, MD SI over Town Creek
3. Allegany County, MD
4. River McKay
5. July 1997
6. MD SHPO
7. Down stream 2000-2002
8. 2 of 5



1. PL- 11-8-190

2. 1047, no 51 over Town Circle

3. Allegany County, MD

4. Ryan McKoy

5. July 1997

6. no SHPO

7. East approach

8. 3 of 5



1. AL-II-B-130
2. ICH7, MD 51 old Tenn Creek
3. Allegany County, MD
4. Ryan McKay
5. JL 484
6. MD SHPO
7. Upstream elevation
8. 4 of 5



1. AL- E- B- 130

2. 1007, MD 51 over Towle Creek

3. Allegany County, MD

4. R. A. M. Co.

5. July 1907

6. MD SHPO

7. Detail of upstream flows

8. 5 of 5

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME

HISTORIC

AND/OR COMMON

Town Creek through Truss Bridge

2 LOCATION

STREET & NUMBER

Maryland Route 51

CITY TOWN

Town Creek

CONGRESSIONAL DISTRICT

6th

___ VICINITY OF

STATE

Maryland

COUNTY

Allegany

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
<input type="checkbox"/> DISTRICT	<input checked="" type="checkbox"/> PUBLIC	<input checked="" type="checkbox"/> OCCUPIED	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> MUSEUM
<input type="checkbox"/> BUILDING(S)	<input type="checkbox"/> PRIVATE	<input type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> COMMERCIAL	<input type="checkbox"/> PARK
<input checked="" type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> EDUCATIONAL	<input type="checkbox"/> PRIVATE RESIDENCE
<input type="checkbox"/> SITE	PUBLIC ACQUISITION	ACCESSIBLE	<input type="checkbox"/> ENTERTAINMENT	<input type="checkbox"/> RELIGIOUS
<input type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input type="checkbox"/> YES RESTRICTED	<input type="checkbox"/> GOVERNMENT	<input type="checkbox"/> SCIENTIFIC
	<input type="checkbox"/> BEING CONSIDERED	<input checked="" type="checkbox"/> YES UNRESTRICTED	<input type="checkbox"/> INDUSTRIAL	<input checked="" type="checkbox"/> TRANSPORTATION
		<input type="checkbox"/> NO	<input type="checkbox"/> MILITARY	<input type="checkbox"/> OTHER

4 OWNER OF PROPERTY

NAME

State Highway Administration DOT

Telephone #:

STREET & NUMBER

301 West Preston Street

CITY TOWN

Baltimore

___ VICINITY OF

STATE, zip code

Maryland 21201

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE

REGISTRY OF DEEDS, ETC. Allegany County Courthouse

Liber #:

Folio #:

STREET & NUMBER

CITY TOWN

Cumberland

STATE

Maryland

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

DATE

___ FEDERAL ___ STATE ___ COUNTY ___ LOCAL

DEPOSITORY FOR SURVEY RECORDS

CITY, TOWN

STATE

7 DESCRIPTION

1154-130

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input checked="" type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input checked="" type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE _____
<input type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Two steel skewed pratt through trusses of 102' with riveted connections carrying Maryland Route 51 over Town Cree, in Allegany County, Maryland, midway between Oldtown, Maryland and Paw Paw, West Virginia.

The trusses are laterally offset so that the end portals are skewed.

CONTINUE ON SEPARATE SHEET IF NECESSARY

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input checked="" type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input checked="" type="checkbox"/> TRANSPORTATION
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES 1932

BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

Roanoke Iron & Bridge Works,
built according to in-house
designs of the State Roads
Commission, H.D. Williar,
Chief Engineer.

See M/DOT general bridge significance.

MS-6-130

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Files of the Bureau of Bridge Design, State Highway Administration, 301 West Preston Street, Baltimore, Md.

Condit, Carl, American Building Art, 20th Century; New York, Oxford University Press, 1961.

CONTINUE ON SEPARATE SHEET IF NECESSARY

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY _____

Quadrangle Name: Old Town
Quadrangle Scale: 1:24 000

UTM References: 17.711140.4378200

VERBAL BOUNDARY DESCRIPTION

N/A

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE N/A COUNTY

STATE COUNTY

11 FORM PREPARED BY

NAME TITLE
John Hnedak/M/DOT Survey Manager

ORGANIZATION
Maryland Historical Trust

DATE
1980

STREET & NUMBER
21 State Circle

TELEPHONE
(301) 269-2438

CITY OR TOWN
Annapolis

STATE
Maryland 21401

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature, to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 Supplement.

The Survey and Inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

RETURN TO: Maryland Historical Trust
The Shaw House, 21 State Circle
Annapolis, Maryland 21401
(301) 267-1438

GENERAL BRIDGE SIGNIFICANCE

The significance of bridges in Maryland is a difficult and subtle thing to gauge. The Modified significance criteria of the National Register, which are the standard for these judgements in Maryland, as in most states, must be broadly applied to allow for most of these structures. In particular the 50 year rule which specifies a minimum age for structures can be waived, and is more commonly done so for engineering structures than for others. Questions of uniqueness and typicality, exemplary types, etc., must set aside for now, because they presuppose a wider knowledge of the entire resources than is presently available. Indeed, this survey is an initial step toward understanding the extent to which Maryland's bridges are part of her cultural resources. Aesthetic considerations may have to be side-stepped entirely, for such structures as these are generally considered mundane and ordinary at best, and sometimes a negative landscape feature, by the layman. It does take a specialized aesthetic sense to appreciate such structures on visual grounds, but a case for visual significance can be made. The remaining criteria are those of historical associations. The relative youth of most of these structures precludes a strong likelihood of participation to events and lives of import. The best generalization can be made for most bridges is that they are built on site of early crossings, developing from fords and ferries through covered bridges and wooden trusses to their present state. This significance inheres in the site, however, and in most cases would not be diminished by the absence of the present structure.

These criteria may also be addressed positively. The primary significance of these bridges, those which were built between the two World Wars, consists in their association with rapidly changing modes and trends in transportation in America during the period. The earliest of them saw the appearance of the automobile and its rise as the preëminent means of getting Americans from place to place. Roads were being improved for increased speeds and capacity, and bridges, as potential weak links on the system, became particularly important. The technology for producing them was not new, and would not change significantly during the period. Accordingly, great numbers of easily, quickly and relatively cheaply built concrete slab, beam and arch bridges were built to span the small crossings, or were multiplied to cover longer crossings where height was no problem.

Truss bridges with major structural members of compound beams, of either the Warren or Pratt types, while more expensive and considered more intrusive on the landscape, were built to span the larger gaps.

With an aesthetic which allowed concrete slab bridges to have classical balustrades, or the application of a jazz-age concrete relief; with the considerable variety possible in the construction of medium sized metal trusses; and with the lack of nationwide standards for highway bridge design, the resulting body of structures displays considerable variety. The sameness of appearance of currently produced highway bridges leads one to believe this variety will not reappear. For that reason alone it is wise to keep watch over our existing bridges. Regardless of ones taste and aesthetic preference, one must be admitted that these older bridges add their variety and visual interest to the environment as a whole, and that it is often the case that their replacement by a standard highway bridge results in a visual hole in the landscape.

In situations requiring decisions of potential effect on these structures, they should receive some consideration. As the recording and subsequent understanding of Maryland's Cultural resources grows, they will be recognized as a significant part of that heritage.

It should be noted that two non-negligible classes of structure have been omitted from this set. The first is the huge number of concrete slab or beam bridges of an average of twenty feet or less in length. These are so nearly ubiquitous and of such minor visual impact (they are often easy to drive across without noticing) that they were not inventoried. They are considered in the general recommendations section of the final report of this survey, however.

The second category is that of the "great" bridges, the huge steel crossings of the major waterways. While they are awesome and aesthetically appealing, they are not included in this inventory because they do not share the problems of their more modest counterparts. They do not lack for recognition, they have not been technologically outmoded, and are in no danger of disappearing through replacement. In a sense, they are not as rare; hundreds of

these great bridges are known nationally, and there is little doubt as to the position of any one bridge within national spectrum. There seems little point in including them with the larger inventory of bridges. From an arbitrary point of view, their dates are outside the 1935 limit which we set for the consideration of bridges. We have departed from that limit on occasion, but will not in this case. These bridges, too, will be considered in the final report.

Moveable bridges deserve a special note regarding their significance. They are rare, and all but the most recent of them have been listed by this survey by virtue of that fact alone. They are, by their nature as intermittent impediments to the smooth flow of traffic, threatened. We rarely tolerate disruptions to what we perceive as our progress. This has been demonstrated recently by the replacement of the drawbridge at Denton, on one of the major routes to the Atlantic Coast from the rest of Maryland.

However much we are inconvenienced by them, we must admit that moveable bridges contribute a share of interest to the landscape. As with significance judgements in general, we here enter a realm which is governed by taste and opinion. Some of us might not enjoy being forced to sit back for a while to look at the surroundings which we would otherwise totally ignore, especially if the engine is in danger of boiling over. But there are those who are fascinated by the slow rise of a great chunk of roadway, moved by quiet, often invisible machinery; who are amused by the tip of the mast which skims the top of the temporary wall; or who reflect on the nobility inherent in a river and the fact that we have not subdued every waterway with our autos, while knowing that we can if we want to.



